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Towards Stable and Competitive Banking in the UK – Evidence for the ICB

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Promoting Stability and Competition in Banking for the Benefit of Consumers and Businesses

Response to the Call for Evidence by the Independent Commission on Banking (ICB)

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1. Executive Summary

In order to achieve all the goals aimed at by the ICB, two reforms are necessary that are of modest nature and that allow banks to continue to function largely as they do currently (specifically, they allow banks to continue their creation of credit).

These proposals are to

- impose direct regulation of the quantity and quality of bank credit
- change the structure of the banking sector in the UK to make it more similar to the German banking sector.

The regulation of credit would take the form of restricting bank credit creation for transactions that are unsustainable – namely transactions that do not contribute to GDP, i.e. the financial transactions. Furthermore, the government (or central bank) should control the quantity of credit that banks are allowed to create, while closely monitoring the allocation (the use credit is put to). The 'guidance' of the quantity and allocation of credit towards productive purposes has been the single most important factor in the success of the 'East Asian miracle' economies Japan, China, Korea and Taiwan.

The reform of the banking sector would introduce a large, but currently virtually non-existing element of locally-owned banks. These would take the two competing forms of local city-owned banks and local credit unions (cooperative banks). In Germany, they account for about 70% of the banking sector, while in the UK currently for less than 1%. It is argued that this banking structure has been the single most important structural reason for the performance of the German economy, as well as other countries (such as Japan).

The proposed reforms would achieve the goals sought by the ICB, virtually without the need for any other reforms. The costs and disruption of introducing the reforms would be minimal, while the benefits would be significant. They would include the end of the boom-bust cycles and banking crises, while achieving a more stable banking sector and sustainable economic performance.

2. Introduction

Scope of this report

The Call for Evidence is based on the ICB's task to make recommendations on structural and non-structural reform measures to promote the stability and competition in banking for the benefit of consumers and businesses. This is defined by the Terms of Reference (ICB, 2010a), which defines the ICB's objective to

- Reduce systemic risk in the banking sector (based on an exploration of the risk posed by banks of different size, scale and function)
- Mitigate moral hazard in the banking system, including the problem of banks perceived to be 'too big to fail'.
- Reduce the likelihood and impact of bank failure
- Promote competition with a view to ensure the needs of banks' customers and clients are efficiently served

The Terms of Reference also require regard to the legal and operational requirements of any reform, and "the importance of generating practical recommendations" (p. 1).

This report is aimed at addressing these issues within the framework provided. Further, like the Terms of Reference, this report will also have regard to "the Government's wider goals of financial stability and creating an efficient, open, robust and diverse banking sector, with specific attention paid to the potential impact of its recommendations on

– financial stability
– lending to UK consumers and businesses and the pace of economic recovery
– consumer choice
– the competitiveness of the UK financial and professional services sector and the wider UK economy; and
– risks to the fiscal position of the government" (p. 1f).

Premises identical with ICB Terms of Reference

As a consequence, there are certain premises on which the recommendations in this report are based. These are that the banking sector will continue to exist in the same or similar legal and functional structure as presently (key characteristics of which are defined in section 3 below), notably that banks will retain the ability to create credit. Furthermore, it is assumed that more drastic reforms to the structure of the banking sector may be difficult to implement politically or practically within a realistic time-scale (while such a reform programme is discussed in detail in a separate, joint report – see Dyson et al., 2010b). Therefore this report focuses on concrete reforms that address all of the above issues and meet the named criteria, but in addition also fulfil the criteria that

- there are no technical or operational difficulties in their implementation
- there are likely to be few political or other practical obstacles to their implementation

- they have in some form already been implemented in the past or in other countries and hence are backed by historical evidence
- they form the cornerstone of successful, competitive and stable banking systems in other countries.

Structure

This report also retains the presentational distinction between structural and non-structural reform initiatives. The structural reform initiatives are defined as those that more explicitly aim at changing the structure of the banking sector in the UK. The non-structural reform initiatives are those aimed at achieving cyclical goals, in particular the avoidance of asset boom/banking bust cycles and, connected to this, economic growth with stability in the financial system. For analytical and presentational reasons, the report will begin with the non-structural reform recommendations, as their analytical justification is at the core of an understanding of the role and functioning of the banking sector.

This will be followed by the structural reform recommendations and a conclusion and summary. The latter includes concrete answers to the specific questions raised by the ICB in its Issues Paper (ICB, 2010b, p. 4-6).

Focus on competition requires knowledge of key competitors

Competitiveness of UK banking in particular and the UK economy in general is a key criterion and achieving it a key stated goal of the work of the ICB, as well as the government (ICB, 2010a). It is therefore important to be aware of who the competitors are, and which policies have made them competitive. For sake of brevity, this report will restrict itself to reference to one of the UK's most important competitors in the 19th and 20th century, which remains its most important competitor and regional partner in Europe: Germany. This is especially relevant, since the German economy lagged behind the UK economy in the 19th century, but managed to overtake the UK by the turn of the century – within the relatively short time period of about 50 years. It will be argued in this report that it was precisely the reforms of the German banking sector that produced the key ingredients for the significantly enhanced competitiveness of the Germany economy, allowing it to overtake the UK. The recommended structural reforms thus make heavy reference to the structure of the German banking sector.

3. Non-Structural Recommendations

Current main function of the banking sector

The textbook view: banks as mere financial intermediaries

According to leading textbooks in banking and monetary economics, the main function of the banking sector is to serve as 'financial intermediary', helping to allocate resources efficiently by collecting savings and distributing them to investors in need of funds (see, e.g. Walsh, 2003; Mishkin and Eakins, 2006).

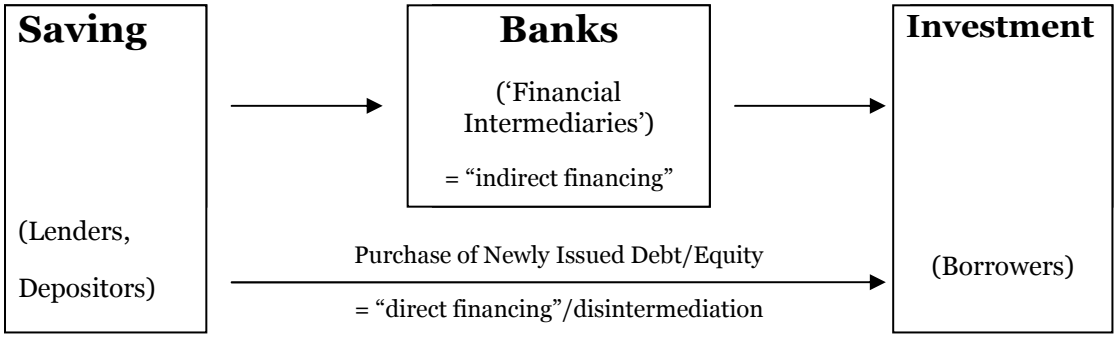

Figure 1. Banks as mere financial intermediaries in textbooks. Funding from banks is called 'indirect financing', while funding from the capital markets is considered 'direct', as the buyers of debt or equity papers effectively lend directly to the firms that borrow.

As a result, banks have been seen as financial intermediaries without unique features that require separate consideration. Consequently, many leading and widely used economic models and theories have not included any direct representation of banks or the banking sector (e.g. Woodford, 2003). This is problematic.

The shortcomings of failing to integrate banks into macro models are now widely recognised:

> "It is fair to say …that the core macroeconomic modelling framework used at the Federal Reserve and other central banks around the world has included, at best, only **a limited role for …credit provision, and financial intermediation**."
>
> "…asset price movements and the feedback among those movements, credit supply, and economic activity were **not well captured** by the models used at most central banks. "
>
> Donald Kohn, Vice-Chairman, Federal Reserve (Oct. 2009)

Problems with the textbook view

It has long been recognised that there are major problems with the view that banks are just like other financial intermediaries and have no 'unique' features.

Blanchard and Fisher (1989) pointed out that

> "The notion that there is something about banks that makes them 'special' is a recurrent theme."

That there is something 'unique' about banks is highlighted whenever there is a banking crisis. The credit crunch has had a significant negative impact on economic activity. When domestic banks are damaged by non-performing loans, why don't foreign banks, non-bank financial institutions or capital markets not fully substitute for the banks' function, leaving the economy unaffected, as theory supposes?

Formally, Fama (1985) has shown that banks must have some kind of monopoly power compared to other financial institutions and market participants; banks are 'special'. Ashcraft (2003) showed that official intervention to close healthy subsidiary banks had an impact on local area real economic activity; banks are 'special'. But leading economic models and theories have failed to explain just what makes banks special.

Reality: banks as the creators and allocators of the money supply

However, banks' primary function is far more important and more far-reaching for the economy. It remains a little-known and rarely highlighted fact that in most countries, including the UK, about 98% of the money supply is created by the banking system. Normally only about 2% of the money supply is created and allocated by the central bank.

As Werner (2005) shows, the banks' power to individually create money through the process of credit creation is based on the regulatory and accounting regime banks are subjected to. Currently, banks world-wide are allowed to individually create new purchasing power by simultaneously booking an asset and a liability when a new credit ('loan') is granted. Upon signing a contract, banks are allowed to add the amount of loan outstanding to the asset side of their balance sheet, while the borrower's current account is credited with the same amount. In this way, banks can create new deposits 'out of nothing', whenever they grant what is called a 'loan'. In reality, they are creating credit (the loan) and money (the deposit account entry) simultaneously (see figure 2). It is this process that produces about 98% of the money supply in the UK economy.

Balance Sheet of Bank A – Reserve Requirement 1%

Step 1 New deposit of £100 with Bank A

Assets	Liabilitie
	£ 100

Step 2 Bank A uses the £100 as reserve with the central bank

Assets	Liabilities
£ 100	£ 100

Step 3 With a reserve requirement of 1%, Bank A can now extend £ 9,900 in credits. Where do the £ 9,900 come from? From nowhere.

Assets	Liabilities
£ 100	£ 100
+£9,900	**+£9,900**

Figure 2. Banks create money 'out of nothing' through double-entry book-keeping (Werner, 2005). They are the creators of about 98% of the money supply in most countries. The above example assumes a reserve requirement of 1%. The smaller the reserve requirement, the larger the money creation by banks, everything else assumed equal. In the UK, the reserve requirement is zero, awarding the ability to create credit without reserve limit to the banks

Banks' ability to create and allocate the money supply is officially recognised

The fact that the vast majority of money circulating in economies is created by profit-oriented private sector enterprises (the commercial banks) is not usually featured in economics or banking textbooks and is not widely known. However, it is known by many people in the financial sector. It is known by some leading financial journalists, although not commonly featured prominently: Martin Wolf of the Financial Times, and a member of the ICB, recognised it in his commentary on 9 November 2010 (*The Fed is right to turn on the tap, Financial Times,* 9 November 2010). Furthermore, it is acknowledged in less well-known passages by central banks:

> ***"The actual process of money creation takes place primarily in banks."***
> (Federal Reserve Bank of Chicago, 1961, p. 3);
>
> ***"...the fractional reserve system... permits the banking system to create money."***
> (Federal Reserve Bank of Kansas City, 2001, p. 57.);
>
> "*Over time... Banknotes and* ***commercial bank money*** *became fully interchangeable payment media that customers could use according to their needs"*
> (ECB, 2000).
>
> *"Contemporary monetary systems are based on the mutually reinforcing roles of central bank money and* ***commercial bank monies****."*
> (BIS, 2003).

> *"When banks make loans, they **create additional** [bank] **deposits** for those that have borrowed the money".*
> (Bank of England, 2007)
>
> "*In the Eurosystem, **money is primarily created through the extension of bank credit**.... The **commercial banks can create money themselves**, the so-called giro money."*
> (Bundesbank, 2009)

Banks as credit allocators

Banks not only make the decisions about how much money to create newly and inject into the economy (through their credit creation), they are also the decision-makers that make the credit allocation decisions. This is due to the fact that the credit market is virtually always in disequilibrium, since credit demand virtually always exceeds credit supply (Jaffee and Russell, 1976; Stiglitz and Weiss, 1981). This credit rationing is caused by the reality of imperfect information, is an 'equilibrium' phenomenon (Stiglitz and Weiss, 1981) and cannot be avoided.

However, it is possible to provide the necessary regulatory control and incentive structure for banks to ensure their decisions about how much credit to create and who to allocate it to will be in line with the public interest, or at least avoid blatant resource misallocation that has a damaging effect on the economy. This will be detailed in the following section.

Banks as receivers of a public goods privilege

As a result of the credit creation activities of banks, it can be said that banks have been granted a public privilege: money creation in most societies has historically been seen as a sovereign prerogative. Money creation and allocation is also a public goods function. Normally, firms granted public goods functions or awarded public privileges are being required by regulators to act in a manner that is compatible with the public interest, is perceived to be fair and transparent, and that is beneficial for the overall economy or fulfils the key government goals (which usually include high, sustainable economic growth).

Since banks are profit-maximising enterprises, their credit creation and allocation decisions are not necessarily identical with the public interest or even long-term stability in the economy or the banking sector.

A key regulatory failure in most countries has been that regulators failed to impose regulations on banks that ensured a desirable outcome from their credit creation and credit allocation activities, and in particular that would result in sustainability, greater financial and economic stability, and in the avoidance of major credit allocation mistakes (that in turn result in inflation, asset price inflation, asset bubbles, debt crises and/or banking crises).

The link between bank activity and economic stability

The link between bank credit creation and the economy

Until about the mid-1980s, the prevailing approaches in macroeconomics relied on the so-called quantity equation (equation of exchange):

$$(1) \quad M V = P Y$$

whereby M stands for the money supply (measured and defined variously as M0, M1, M2, M3 or M4), V stands for the (income) velocity of money (originally the number of times gold was said to circulate during an observation period), P for the GDP deflator (the appropriate price level) and Y for real GDP.

In other words, equation (1) says that effective money (MV) is equal to nominal GDP. Until the 1980s, many economists were confident about this relationship. A textbook even argued that equation (1)

> "is valid under any set of circumstances whatever since it can be reduced to the statement: in a given period by a given group of people, expenditures equal expenditures, with only a difference in the computational method between them" (Handa, 2000, p. 25).

Until the 1980s, most macroeconomic theories and schools of thought assumed that velocity V would be constant. This turned out not to be the case. Due to this velocity decline, the relationship between monetary aggregates and nominal GDP had become unpredictable. Attempts at explaining this phenomenon raised more questions than they answered: usually attributed to financial deregulation and innovations, it is not clear why these should lead to a *lower* velocity, instead of a higher one. With the empirical failure of the quantity equation concept unexplained, economists proceeded to either continue to use it anyway or abandon any reference to monetary aggregates.

However, there are two flaws in this equation and its use. As a result it is not 'valid under any set of circumstances whatever'. It turns out to have been a special case that applies only to exceptional circumstances, and its failure can be easily explained.

The equations differ from the original formulation of the quantity equation by Irving Fisher (1911), which can be written as follows:

$$(2) \quad M\,V = P\,Q$$

Fisher said that the 'effective' money MV (assumed to circulate and be used for transactions) is equal to the value of transactions (the sum of all pairs of prices times quantities transacted). We can rephrase this slightly and say that, in its original form, the quantity equation stated:

> The total value of transactions during any time period must be the same as the amount of money used to pay for these transactions.

This definition indicates why the quantity equation is also known as the 'equation of exchange'.[1] But there was an important drawback of Fisher's equation. When attempting to employ statistical data to apply it in practice, M and P could be readily identified. V was the residual, thus data on transactions Q were necessary. But they did not exist. As national income accounts were becoming increasingly available, Pigou (1917) and several of his colleagues at Cambridge University argued that the stock of money should be proportional to 'total nominal expenditures', which could be represented by the expenditure-side of GNP. Many Cambridge economists therefore replaced PQ with PY, yielding the most widely-known formulation of the quantity equation in (1) above.

Yet, despite Handa's (2000) and many others' claims that equation (1) is true by definition, from a comparison with Fisher's earlier formulation it is obvious that equation (1) is a special case that is only accurate if:

$$(3) \quad P\,Y = P\,Q$$

or, in other words, if nominal GDP is a robust proxy for the value of total transactions in the economy for which money is changing hands.

[1] Since Fisher had the concept of species in mind as money M, and since he realized that the total volume of transactions was much larger than the stock of gold or precious metals, he, like other economists at the time, felt that banking or other financial innovations served to economise on this stock of gold. Thus some kind of 'multiplier' was necessary – the number of times one unit of gold money M was used for transactions during the period of observation. This is velocity V.

It is therefore necessary to distinguish between GDP-based transactions and non-GDP-based transactions.[2] Asset transactions are of substantial volume in most economies, yet are not included in the GDP statistics. Besides financial transactions, the majority of real estate transactions are equally not part of the GDP statistics.[3] Werner (1992, 1997) argues and shows in the Japanese case that the widely observed velocity decline is not due to 'disintermediation', financial innovations or structural issues such as deregulation, as the literature has frequently argued, but instead is the result of an increase in money used for transactions that are not part of GDP.

Fisher and after him Keynes suggested to distinguish between transactions arising from the sale or purchase of finished goods and services (which can be measured by GDP) and financial transactions that are not related to national income. Fisher (1926) distinguished between income and financial transactions, Keynes (1930) between 'industrial' and 'financial' transactions. Theoretically, we can disaggregate the transaction data any way we wish.[4] It will become an empirical issue whether we can find suitable statistical data to proxy the theoretical breakdown. Following Werner (1992, 1997), we choose to break both sides of (1) down, on the one hand into money used for transactions that are part of GDP and those that are not and on the other hand the value of transactions that are part of GDP, and those that are not.

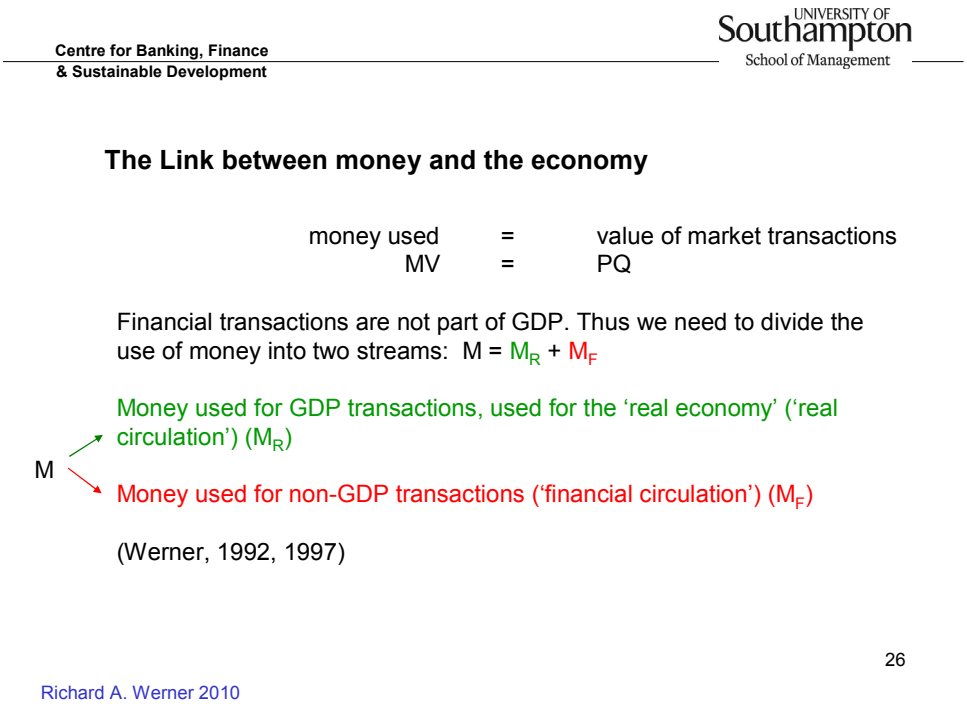

Figure 3. Monetary flows need to be separated into those contributing to GDP and those that do not. The correct definition of money 'M' in a quantity equation in modern financial systems is credit ('C').

[2] See also Werner (1992, 1997d).

[3] Werner (1992). Some parts of real estate transactions are picked up by the housing investment statistics, but by no means the majority.

[4] This was recognized and utilized by Fisher (1911), Keynes (1930) and Milton Friedman, who writes in his entry on 'Quantity Theory' in the Encyclopedia Britannica that with MV=PT "Each side of this equation can be broken into subcategories: the right-hand side into different categories of transactions and the left-hand side into payments in different form", p. 435..

The reason why this has not been implemented earlier is the focus by most economists on monetary aggregates (such as M1, M2, M3) as measures of money 'M' that is circulating in the economy. However, in modern financial systems, the money that is circulating and used for transactions cannot be measured by such deposit aggregates, since they are sub-sets of private sector savings: in other words, money that is not circulating. Circulating money that is used for transactions can however be measured by credit creation. We can thus improve on the traditional equation of exchange by substituting credit (C) for money (M) and formulating two equations, depending on the use of the credit money.

(4) $C_R V_R = P_R Y$

with $V_R = (P_R Y)/C_R = \text{const.}$

(5) $C_F V_F = P_F Q_F$

with $V_F = (P_F Q_F)/C_F = \text{const.}$

For growth:

(6) $\Delta(C_R V_R) = \Delta(P_R Q_R) = \Delta(P_R Y)$

(7) $\Delta(C_F V_F) = \Delta(P_F Q_F)$

From equations 6 and 7 it follows that bank credit creation will boost nominal GDP growth, if it is extended for transactions that contribute to GDP (such as investments in the production of goods and services). Bank credit creation will boost the value of asset transactions, if it is extended for asset transactions. Bank credit creation in the form of consumer credit adds new purchasing power that will boost consumption demand, but does nothing to increase the amount of goods and services available: ceteris paribus, consumer price inflation has to follow.

However, only the production of goods and services can over time and in aggregate deliver the income streams to service bank credit and repay the principal. Hence we can deduce the following principles for banking, which should be reflected in bank regulation:

Asset boom/bust cycles and the role of banks

Banks are the creators and allocators of the money supply. In exchange for this privilege, banks have not been required to ensure a specific outcome of their money creation and allocation decisions, but have been able to focus on profit maxmisiation. As a result, they have more often than not decided to create credit (and hence to add to the money supply) and allocate the new money for speculative financial transactions. These deliver potentially high returns in the short-term, but create systemic problems: as they are unproductive, they are unsustainable in aggregate. Only productive credit creation is sustainable. As a result, they cause inflation – namely asset price inflation. This, however, is difficult to recognise without analysis of bank credit allocation: asset price inflation is often misunderstood as accurate reflection of productivity gains (see, for instance, research and policy statements on the 'new economy' in the US in the 1990s). An analysis of bank credit creation reveals that the proportion of bank credit allocated for unproductive, asset transaction purchases has multiplied significantly, including in the UK, amounting to a multiple of GDP. Since such unproductive credit creation cannot in aggregate be paid back (except in the short-term, by sustaining an ultimately unsustainable asset bubble), it must turn into non-performing loans that will cripple the banking sector: bank equity is insufficient to cover the size of non-performing loans. Hence banks are quickly insolvent, at which time it is usually suggested that tax money is used to rescue them.

Thus it emerges that one of the main reasons the economic and financial crisis became so severe is that the banking sectors of many countries had created significant amounts of credit for transactions that are not part of GDP (i.e. mainly financial and real asset transactions), both on and off the balance sheets of banks. Credit extension for such transactions, if expanding in aggregate, is unsustainable, because these transactions do not yield sufficient intrinsic income streams to service and repay the debt created. However, as banks collectively increase credit for such asset transactions, due to the banks' function as money supply creators, additionally created money supply is injected into the asset markets concerned.

Ceteris paribus, this pushes up asset prices and suggests capital gains that may make this process temporarily appear to be sustainable. However, asset prices are a function of bank credit extended for asset transactions. As soon as banks reduce their asset transaction credit creation, asset prices fall and loans become non-performing. This results in banks becoming more risk-averse, hence reducing credit further. Thus banking activity is always pro-cyclical: banks create the credit that enables the majority of economic transactions (for further analysis and empirical evidence, see e.g. Werner, 1997, 2005).

What is possible: High and sustainable growth without inflation

The example of the Japanese, Chinese, Korean and Taiwanese experience in the second half of the 20th century (but also the German experience of the late 19th century and first half of the 20th century) shows that government intervention that regulates the banks' behaviour in handling the public privilege to create the money supply is welfare enhancing, can act to avoid banking crises, and is able to create stable, high and non-inflationary economic growth.

In all cases, regulators ensured that banks were given disincentives to create credit for non-GDP transactions, and were given incentives to create credit for productive investment purposes.

The most common form of such intervention, used in all of the above named countries, has been the imposition of 'credit guidance' (sometimes called 'window guidance' or 'credit controls'), whereby the central bank (or the finance ministry) imposes quantitative and qualitative quotas on the entire banking sector, allocated according to a principle that is accepted by the banks, while maintaining competitive behaviour between them (proportionality to existing size). Furthermore, strict limits or even bans are imposed on the creation of credit by banks for particular transactions that may otherwise create more harm than good, especially financial and asset market transactions (i.e. transactions not directly contributing to GDP) and to some extent also consumer loans.

The incentive-compatible and efficient design of a regime of 'credit guidance' is understood (Werner, 1998, 2002, 2003). It can be replicated in most countries. Indeed, most central banks used such regimes officially until at least the 1970s. Many, such as the French or several other European central banks, employed it until the 1980s (Werner, 2005).

The limitations of the Basel regime

This is where the Basel (I, II, III) framework remains deficient: capital adequacy requirements – even of a cyclical nature – are altogether the wrong instrument to try to reign in banks' undesirable credit creation. This is why the world has seen more banking crises after Basel I than during the same time period before its introduction. Since banks are the creators of the money supply, they also create the money that is used to purchase shares newly issued by banks to bolster their capital ratios. Already Knut Wicksell recognised this a century ago:

> "The banks in their lending business are not only not liited by their own capital: they are not, at least not immediately limited by any capital whatever; by concentrating in their hands almost all payments, they themselves create the money required…" (Wicksell, 1907, pp. 214-15).

Requiring banks to raise more capital in the boom times won't stop the boom in the first place – it is created by increased bank credit, which can partly be used to fund the higher capital adequacy ratios.

The key reform 'credit guidance' quotas to ensure an efficient, competitive allocation of newly created purchasing power

Stable growth without asset bubbles and banking crises

A different approach is needed to prevent banking crises, namely the imposition of quantitative restrictions and targets (i.e. quotas that are to be met) on the creation of credit by banks, according to the use the money is put to. One simple rule would prevent banking crises: allow banks to create credit only if it is used for transactions that contribute to GDP. Such transactions have a significantly higher probability of being able to generate the income streams that make them sustainable in the long-run. Financial transactions are not part of GDP. In aggregate, financial transactions do not yield intrinsic income streams to render them sustainable. They may appear viable for a time due to the booking of capital gains. However, this is due to the fact that they tend to collateralise assets, which are driven up by the very act of creating credit on their basis. As a result, when a substantial number of banks engage in credit creation for asset-backed transactions, their behaviour tends to produce appreciating asset prices. While each bank may consider the asset price as an exogenous factor, the banks suffer from the fallacy of composition: their collective behaviour in creating credit determines asset prices. As a result, asset bubbles deflate quickly when bank credit for such asset transactions dries up. As soon as this happens, banks' stability is visibly threatened, since the credit granted for financial transactions in aggregate must become non-performing.

Given this nature of asset transaction credit, it is not obvious why the public privilege of money creation should be accessible to those who engage in such transactions. This simple rule will also render obsolete any need to impose a Tobin tax or further restrictions on bonuses or hedge funds. Without credit creation available for financial transactions, it would not be possible to inflate asset bubbles. Since they precede banking crises, the latter would also become history.

Other measures that fail to impose such direct credit limits are not likely to succeed in preventing banking crises, while themselves becoming obsolete if credit quotas are imposed. Furthermore, such a regime of credit quotas would render the credit creation and allocation mechanism more transparent and the decision-makers accountable to democratic controls, as the democratic decision-making process could be deployed to achieve desired outcomes.

It should be emphasised that this reform proposal does not affect the ability of investors or consumers to engage in speculative or unproductive transactions. It is not these transactions that are being restricted by this reform proposal, but merely the creation and allocation of new money for their benefit. This extra-normal economic privilege, which carries negative externalities with it, cannot be justified for unproductive transactions.

Not by the 'invisible hand'

Since each bank is neither asked to nor able to consider the macroeconomic outcome of collective bank action, ultimately, the government or central bank have the responsibility to monitor aggregate credit creation and its allocation in terms of type of economic activity (productive: credit for the investment in the production of new goods and services; unproductive: credit for asset transactions; credit for consumption). Unproductive credit creation always results in inflation (of the asset inflation or consumer price inflation type, depending on banks' direction of credit).

Once a banking crisis has happened, the government or central bank has to step in with injections of liquidity, capital support and guarantees. This, however, does not need to expose the taxpayer to potential losses, as tax money should not be used for such purposes. Instead, the public sector should make use of its prerogative to create money newly. The advantage is that no tax burden or national debt, no interest burden or meaningful new obligation by the public sector is created in this way. The principle of moral hazard indicates that tax money should not be used to bail out banks: tax payers are not responsible for the crisis and they did not enjoy the substantial speculative profits over several years that those who are responsible enjoyed. Nor will the use of newly created public money be inflationary: it is merely used to shore up the banking sector balance sheets, which itself does not inject any money into the non-banking sectors of the economy – and hence cannot result in inflation.

The theoretical basis: 'non-fiction economics'

It has long been recognised that the credit market is rationed (see also Adam Smith, 1776). Rationed markets call for government intervention to ensure efficient, competitive outcomes.

It is important to realise that the credit guidance principles deployed by Germany and the East Asian miracle economies are not based on the (failed) principles of a socialist planned economy. To the contrary, they are derived from capitalist economic theory that uses private ownership, but does not adopt unrealistic assumptions about the behaviour of agents or markets. In other words, it is the result of empirically based economics that recognises the reality of markets and people's behaviour. In such a realistic world, markets are not in equilibrium. It is one of the achievements of neoclassical economics to have shown that the requirements for market equilibrium are so stringent that we know for certain, they cannot be met in our world. As a result, we know that markets are virtually always in disequilibrium.

In this case the hurdle for government intervention to produce economic outcomes that are superior to markets left on their own devices is significantly lower. In other words, once one discards the theoretical dream world of neoclassical economics and deals with this world, it emerges that well designed, appropriate and light-footed intervention in key markets can produce significant welfare and economic performance benefits, while being able to avoid the worst drawbacks of unfettered markets. Given the pivotal role of the money creation and allocation process, it is here that this form of intervention (credit guidance) is required. This is likely to even reduce the need for government intervention in other markets or concerning other types of transactions. Further details on empirically based economics can be found in Werner (2005).

4. Structural Recommendations

Key ingredients for high, balanced and sustainable growth in Germany

Structural research requires a comparative analysis

Competitiveness of UK banking in particular and the UK economy in general is a key criterion and achieving it a key stated goal of the work of the ICB, as well as the government (ICB, 2010a). It is therefore important to be aware of who the competitors are, and which policies have made them competitive.

In order to come to conclusions about the appropriateness of the UK banking structure it is helpful to consider other banking structures, especially those in successful competitor nations.

For sake of brevity, this report will restrict itself to reference to one of the UK's most important competitors in the 19th and 20th century, which remains its most important competitor and regional partner in Europe: Germany.

This is especially relevant, since the German economy lagged behind the UK economy in the 19th century, but managed to overtake the UK by the turn of the century – within the relatively short time period of about 50 years. It will be argued in this report that it was precisely the reforms of the German banking sector that produced the key ingredients for the significantly enhanced competitiveness of the Germany economy, allowing it to overtake the UK. The recommended structural reforms thus draw on an analysis of the structure of the German banking sector and its contribution to German economic competitiveness.

Features of the banking sector in Germany today

While in the UK six banks account for about 90% of the banking sector today, in Germany such large High Street banks account for only 12.5% of the banking sector.

Meanwhile, in Germany about 70% of the banking sector is accounted for by two types of locally-based, locally-controlled and locally-owned bank: (a) the credit unions (aka as cooperative banks, *Volksbanken* in German) and (b) the municipality-owned savings banks (*Sparkassen* in German)

(a) The credit unions account for about 27% of the banking market in Germany. They consist of hundreds of independent, small credit unions, one of which is found to be headquartered in almost every town (and sometimes even village). As not-for-profit banks (similar in some ways to UK mutual societies) they extract a lower percentage of profits from their customers. Further, as they are locally based, this means the banking and seigniorage benefits that banks enjoy remain within the local communities.

(b) The savings banks account for about 43% of the banking market in Germany. They consist of hundreds of independent, small banks that are headquartered in many towns, and publicly owned (by the local municipalities). Like the credit unions, they are not-for-profit banks, although their recycling of banking profits takes the form of supporting local city and district councils by supplementing their tax revenues, hence helping to keep local taxes lower than they would otherwise be.

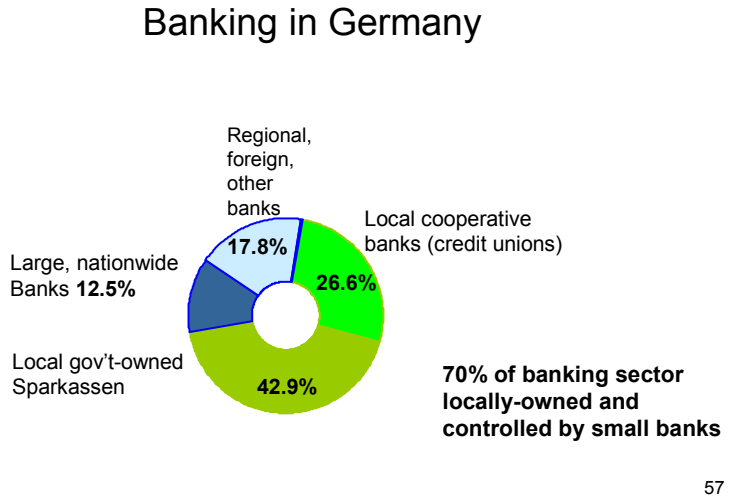

Figure 4. The German banking sector is dominated by independent, locally-based banks.

There are several advantages from the structure of Germany's banking sector. Among these are:

(1) Local decision-making favours small firms

Banking relies on credit risk analysis in a world of imperfect information. Judgements need to be made about the creditworthiness of potential borrowers. The more information can be gathered, the better the decision is likely to be. Unlike in the UK, where a large proportion of bank credit is granted on the basis of centrally-administered decisions from national credit sanction departments, in Germany local bank managers can get to know local borrowers over years, and are thus able to make better decisions.

There is a case to be made that by knowing the local bank managers since one's early childhood, there is a greater incentive for borrowers to behave responsibly and avoid default: social pressures may act as an incentive device that helps mitigate the general banking problems of moral hazard and adverse selection.

(2) Local decision-making creates and allocates new money locally

There has been a recent movement towards the introduction or at least debate of 'local currencies' to enhance local business while reducing the carbon footprint of economic activity in the UK. However, schemes such as the Lewes Pound, desirable as they may be, lack the ability to create credit and hence add to the money supply on sound principles in the local communities. Through its system of locally owned credit unions and savings banks, German communities – the locus of its hundreds of medium-sized enterprises that account for about 70% of employment – enjoy the benefits of a true local 'currency' that grows with their needs.

(3) Local banks tend to engage in sustainable banking

Many of the unsustainable, unproductive banking activities, such as primarily credit creation for unproductive (speculative, consumptive) transactions benefit from a banking structure that is highly centralised, whereby economies of scale are utilised, and the focus is on large-scale 'deals' that will enhance bonus receipts of bankers.

By having a dominant component of its banking sector based locally, German credit unions and savings banks have been able to avoid the worst excesses of the international banking crisis. Indeed, most were not affected at all. While some of their jointly owned central organisations (such as the Landesbanken) have invested in sub-prime related schemes, this was due to their scale and recent regulatory pressures to reduce government guarantees and enhance their profit-orientation. It is therefore also a case in point: these central organisations should not have been allowed to engage in such activities. The comparative advantage of the German banking structure has been in the decentralised, local nature of the majority of their banks.

(4) The ubiquitous availability of 2 types of local banking enhances competitiveness

The German banking sector, including its largest components, must be considered highly competitive by international and UK standards. Fees tend to be modest, transaction speeds tend to be high. The diverse nature of the German banking structure is likely to be a main reason: customers can choose between High Street banks, a number of foreign and specialised banks, and even in smaller towns have the choice between the local credit union and the local savings bank. Most savers have accounts with both the credit union and the savings bank.

(5) Degree of inequality likely affected by shape of banking sector

Recently, the role of economic inequality in affecting or causing a number of economic, social and health problems has been highlighted (Wilkinson and Pickett, 2009). Due to banks' role in creating and allocating the money supply, their activity and the structure of the banking sector is likely to have a significant impact on overall measures of inequality.

In the above work, Germany and Japan have been cited as having superior (lower) levels of inequality. It is noteworthy that the Japanese banking sector is in many ways similar to the German one, with an important role played by local and second-tier regional banks. I hypothesise that further research on this issue will find evidence that the structure of the banking system is an important determinant of inequality.

It is also noteworthy that in Japan a conscious decision was made many decades ago to introduce the key features of the German banking system, including its system of credit guidance and the dual structure of locally based banks for small firms and large banks for large corporations.

Correlation between banking structure and economic take-off

A more detailed historical analysis is beyond the scope of this report. However, it is indicative, and in my view a reflection of causation, that key structural features of the German banking system as seen today were introduced in the second half of the 19th century and further enhanced in the first decades of the twentieth. This coincides with the period of economic take-off and rapid growth, based on local small and medium-sized enterprises on the one hand, and large and growing industrial firms on the other. Both obtained suitable funding

from the diverse banking sector (the large firms from the large banks), and thus contributed to continued competitiveness of the economy.

Key structural reform recommendations

Abolish current government restrictions on credit unions

After the banking crisis, UK banks have been criticised for excessive bonuses, unproductive and speculative lending and a lack of interest in lending to local, small borrowers. However, the UK has banks that engage in none of these activities: the credit unions. Yet, they account for about 1% of the banking sector.

As Werner (2009) argues, this is mainly due to the severe regulatory restrictions that impose quantity controls and growth limits on UK credit unions. Further, UK credit unions are not allowed to cater to local firms, as only individuals are allowed to be their customers.

Support the creation of cooperative, locally based banks

Beyond the reform and growth of existing credit unions, cooperative banks that are locally based should be enhanced. A commission should be appointed to consider a fundamental reform of the credit union, mutual and cooperative financial services sector in the UK with a view to greatly enhancing it and nurturing it nationwide.

Support the creation of publicly owned local banks

A commission should be appointed to determine the details of a government policy to encourage city councils nationwide to establish their own banks. Public funds, created for instance by the central bank without cost to the tax payer, could be used to capitalise such a nationwide system.

Japan benefited from the decision to introduce a German-style banking system. So can the UK today.

5. Answers to Questions Raised by ICB

While the answers to the concrete questions raised by the ICB should be obvious from the report and its conclusion and summary, for the sake of clarity the questions are also listed below and briefly answers, with reference to the relevant sections in this report.

Question 1.1:

> **What is the relationship between the Commission's two primary objectives of financial stability and competition (including consumer choice)? Are these goals fundamentally in harmony? If not, what are the tensions between them and how can reform proposals be designed to alleviate the tensions?**

It is possible to achieve financial stability and enhanced competition by adopting the two major reforms advocated in this report: impose 'credit guidance' on banks' lending decisions (enhanced stability) and reform the structure of the banking system by introducing a large (25% to 50%) locally-based component, consisting of two types of locally-owned banks, namely the municipality-owned local banks and the credit unions.

Alternative reform proposals that do not abolish the ability of banks to create credit are in my view not able to achieve both goals jointly.

Question 1.2

> **What weight should the Commission give to the other objectives – on lending and the pace of economic recovery, competitiveness, and risks to the Government's fiscal position – in its analysis?**

A significant weight should be given to these issues, since they are closely connected. The concept and causal link that connects them is the banks' ability to create credit, and their quantitative and qualitative decision about the use newly created money is put to. Structural reform of the banking system to introduce a large locally-controlled component (in the form of municipal banks and credit unions) could greatly enhance the positive impact the banking sector can make on economic growth, productivity and the government's fiscal position, while enhancing competitiveness of banks themselves.

Question 2.1

> *Reform options related to the structure of banks*
>
> - Separation of retail and investment banking
> - Narrow banking and limited purpose banking

- Limits on proprietary trading and investing
- Structural separability, including living wills and resolution schemes
- Contingent capital
- Structure-related surcharges

Reform options related to the structure of markets

- Measures to reduce market concentration
- Market infrastructure reform

Are there other broad options for reform that should be added to this framework? For example, should any of the "other reform initiatives" listed in Paragraph 4.33 be matters on which the Commission should seek to make recommendations?

All named proposals may be well-intentioned, but are not likely to achieve their proclaimed goals. Taxation and capital and liquidity requirements have a limited impact in avoiding pro-cyclical bank behaviour, due to the banks' function to create the money supply. If the latter function is maintained, only the imposition of direct 'credit guidance' quotas (quantitative and qualitative) on bank credit extension, combined with a reform of the banking sector to introduce a large locally-owned component (of credit unions and publicly owned banks) will achieve the goals envisaged by the ICB.

Question 2.2

Which (if any) of the reform options identified in the above framework most deserve further development, specification and analysis?

Macro-prudential regulation, the shape of regulatory institutions and accounting rules for financial institutions. A thorough analysis of these should identify the main recommendations of this report.

Question 3.1

What would the benefits of these options be, in particular for financial stability and competition? How can these benefits be quantified?

The reforms proposed here, to impose 'credit guidance' of bank credit and reshape the banking structure should have measurable results that can be measured, after introduction, in productivity, real GDP growth, employment, measures of equality, etc. Ex ante simulations of the potential impact are possible, but as always with simulations are reliant on assumptions. Hence historical analysis of actual prior case studies would be preferable as quantification exercises (i.e. a study of the East Asian 'miracle' economies and German economic performance).

Question 3.2

What would the likely costs be of the various options? For example, what lost efficiencies might there be if banks were required to reduce the range of activities they could undertake, and/or their size? How can these costs be quantified?

The proposed reforms would have negligible costs. The credit guidance regime could be implemented relatively easily. Bank loan officers already inquire and monitor in detail the use borrowed money is put to. National income accounting techniques exist, which enable the ready classification of transactions into those that are part of GDP and those that are not.

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